United States
Department of
Agriculture

**Natural
Resources
Conservation
Service**

Idaho
Basin Outlook Report
January 1, 1997

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:

Your local Natural Resources Conservation Service Office
or
Natural Resources Conservation Service
Snow Surveys
3244 Elder Street, Room 124
Boise, ID 83705-4711
(208) 378-5740

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

IDAHO WATER SUPPLY OUTLOOK REPORT

JANUARY 1, 1997

SUMMARY

Snow, rain and record high temperatures combined on the first day of the new year to produce record flooding and mud slides in the western half of Idaho. In spite of the rain and warm temperatures, record high snowpacks are reported in many portions of the state. As a result, streamflow projections for the Boise, Payette and Big Lost rivers currently call for the ***largest runoff volume of record***. Streams in the rest of the state are forecast to produce extremely high runoff volumes as well. Water supplies will be abundant in Idaho, and attention will be focused on flood control this year. The drought years of the late 80's and early 90's are definitely behind us.

SNOWPACK

The Panhandle and upper Snake basins are reporting the highest snowpack of the last 30 years. Elsewhere in the state, snowpacks are the second highest of record. Many snow measuring stations across the state are reporting snow water content levels of about twice the January 1 average; this much snow is not normally seen until March or April. The highest snowpack levels are 245% of average in the central mountains encompassing the Boise, Wood and Lost river basins. Elsewhere in the state, the snowpacks range from 180-220% of average. Many snow measuring stations tripled in snow water content during December. The majority of melting that produced flooding in early January occurred below 5,000-6,000 feet. High elevation snow measuring sites did not show any melting and continued to increase in snow water during the wet weather.

PRECIPITATION

Record precipitation fell in December, generating the highest monthly increases in snow water since daily records began in the early 1980s. December precipitation was three times normal at many stations in the central and west-central Idaho mountains. Elsewhere in the state, precipitation was 200% of average in the Panhandle and Clearwater basins and 238-270% in eastern and southern Idaho. Many stations in the northern two-thirds of the state received 15-25 inches of precipitation during December. Precipitation for the water year (beginning October 1) ranges from 190% of average in the northern and southern basins to 200% in central Idaho.

RESERVOIRS

Flood control releases are being made from many of the reservoirs and lakes across the state in anticipation of the high snowmelt runoff. This is the first time in recent years that almost all reservoirs and lakes in Idaho reported above average storage for January 1. Many reservoirs rapidly increased in storage from the low elevation rain and snowmelt in late December and early January. Flood control releases will continue throughout the winter to provide adequate storage space to capture next spring's peak runoff.

Note: NRCS reports reservoir information in terms of usable volumes which includes both active, inactive, and (in some cases) dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in the back of this report.

STREAMFLOW

Rain and low elevation snowmelt combined to produce record peak streamflow volumes on the Weiser River and Snake River in Hell's Canyon in early January. High elevation snowpacks did not melt and remain well above average throughout the state. There is still potential for very high streamflows later in the spring and summer when the high elevation snowpack starts melting. Fall streamflow has been above average across the state with the exception of the Clearwater basin at 80-90% of average. As a result of the record high snowpacks, many streams in central and northern Idaho are forecast near record levels. The Boise, Payette and Big Lost river basins are forecast to yield record runoff this spring. Streamflow forecasts for the state range from 130 to 220% of average for the April-July period.

WATER SUPPLY FORECASTING PRODUCTS ON THE INTERNET

Water Supply Forecasting products are now available on the INTERNET. These products include the SNOTEL Update Reports, State Basin Outlook Reports, and products previously published in the Water Supply Outlook for the Western United States.

The Universal Resource Locator (URL) for our home page is: http://id.nrcs.usda.gov
You can access the Anonymous FTP server by pointing your INTERNET browser (Netscape, Mosaic, etc.) to: ftp://ftp.wcc.nrcs.usda.gov

We will continue to add more products to our Home Page and Anonymous FTP server and welcome any comments and suggestions you might have. Questions and comments should be directed to the NRCS Snow Survey.

Natural Resources Conservation Service
Snow Survey Staff
3244 Elder Street, Room 124
Boise, Idaho 83705-4711
Phone (208) 378-5740
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IDAHO SURFACE WATER SUPPLY INDEX (SWSI)
As of January 1, 1997

The surface water supply index (swsi) is predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences.

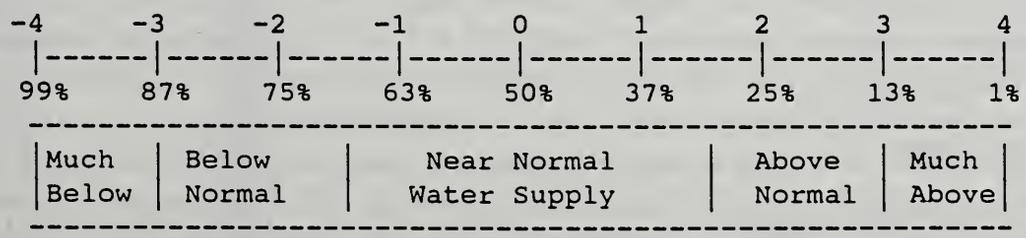
SWSI values are published January through May, and provide a more comprehensive outlook of water availability than either streamflow forecasts or reservoir storage figures alone. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been established for most basins to indicate the potential for agricultural water shortages.

The following agencies and cooperators provide assistance in the preparation of the Surface Water Supply Index for Idaho:

US Department of Commerce, National Weather Service
US Bureau of Reclamation
Idaho Water Users Association
US Army Corps of Engineers
Idaho Department of Water Recourses
PacifiCorp

BASIN or REGION	*SWSI Value*	*Most Recent Year With Similar SWSI Value*	*Agricultural Water Supply Shortage May Occur When SWSI is Less Than*
PANHANDLE	0.1	1985	NA
CLEARWATER	1.4	1981	NA
SALMON	2.0	1978	NA
WEISER	0.9	1978	NA
PAYETTE	4.0	1974	NA
BOISE	4.0	1983	-2.6
BIG WOOD	3.7	1982	-1.4
LITTLE WOOD	3.6	1983	-2.1
BIG LOST	4.0	1984	-0.8
LITTLE LOST	3.8	1984	0.0
HENRYS FORK	3.6	1986	-3.3
SNAKE (AMERICAN FALLS)	3.6	1983	-2.0
OAKLEY	3.1	1976	0.0
SALMON FALLS	3.7	1986	0.0
BRUNEAU	3.6	1975	NA
OWYHEE	0.5	1994	NA
BEAR RIVER	1.0	1982	-3.8

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION



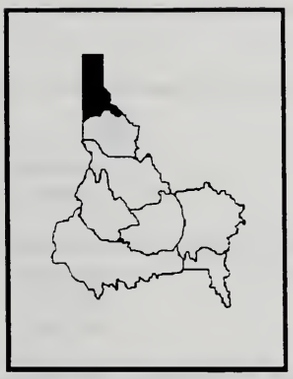
Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply", represents three SWSI units and would be expected to occur about one third (36%) of the time.

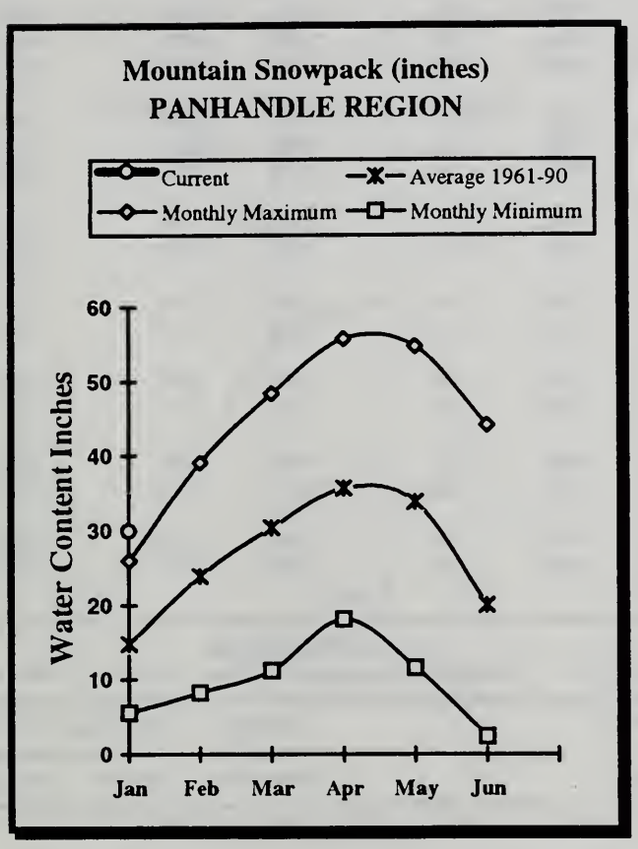
I D A H O B A S I N - W I D E S N O W P A C K S U M M A R Y

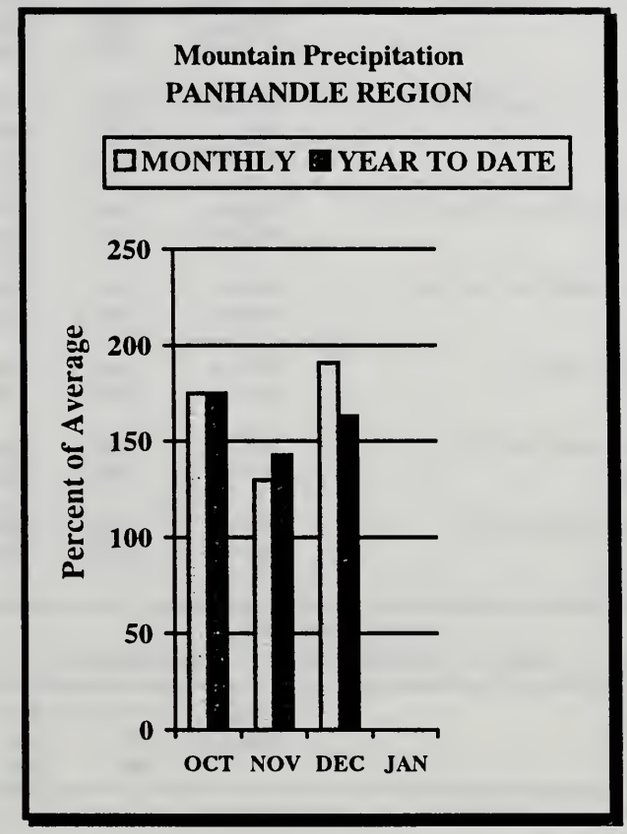
JANUARY 1997

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Kootenai ab Bonners Ferry	143%	167%
Moyie River	149%	157%
Priest River	428%	232%
Pend Oreille River	202%	199%
Rathdrum Creek	829%	242%
Hayden Lake	Not Available	
Coeur d'Alene River	474%	216%
St. Joe River	290%	203%
Spokane River	467%	220%
Palouse River	528%	275%
North Fork Clearwater	299%	200%
Lochsa River	181%	213%
Selway River	173%	201%
Clearwater Basin Total	249%	202%
Salmon River ab Salmon	179%	230%
Lemhi River	123%	161%
Middle Fork Salmon River	192%	215%
South Fork Salmon River	213%	217%
Little Salmon River	518%	216%
Salmon Basin Total	195%	207%
Mann Creek	315%	173%
Weiser River	370%	209%
North Fork Payette	338%	206%
South Fork Payette	217%	204%
Payette Basin Total	284%	207%
Middle & North Fork Boise	229%	220%
South Fork Boise River	203%	214%
Mores Creek	410%	248%
Boise Basin Total	253%	220%
Canyon Creek	1175%	152%
Big Wood ab Magic	210%	245%
Camas Creek	358%	211%
Big Wood Basin Total	221%	237%
Little Wood River	289%	235%
Fish Creek	Not Available	
Big Lost River	268%	279%
Little Lost River	176%	202%
Camas-Beaver Creeks	293%	171%
Henrys Fork River	212%	223%
Teton River	267%	201%
Snake above Jackson Lake	169%	210%
Gros Ventre River	133%	189%
Hoback River	153%	218%
Greys River	141%	195%
Salt River	142%	205%
Snake above Palisades	158%	210%
Willow Creek	463%	259%
Blackfoot River	314%	238%
Portneuf River	222%	229%
Snake abv American Falls Resv	182%	218%
Raft River	288%	278%
Goose-Trapper Creeks	296%	268%
Salmon Falls Creek	208%	205%
Bruneau River	218%	200%
Owyhee Basin Total	445%	186%
Smiths & Thomas Forks	169%	243%
Bear River ab WY-ID line	168%	198%
Montpelier Creek	238%	172%
Mink Creek	226%	214%
Cub River	165%	260%
Bear River ab ID-UT line	180%	210%
Malad River	320%	356%
Green River ab Warren Bridge	155%	227%
Upper Green River (West Side)	138%	202%
New Fork River	171%	220%
Big Sandy River/Eden Valley	146%	202%
Green River above Fontenelle	147%	213%
Hams Fork River	149%	217%
Green River above Flaming Gorge	149%	204%

PANHANDLE REGION
JANUARY 1, 1997







WATER SUPPLY OUTLOOK

Cold temperatures brought snow and more snow to the Panhandle Region. Mountain precipitation was 180% of average during December. Precipitation amounts ranged from 10 to 25 inches; normal December precipitation amounts range from 7 to 12 inches. Some snow measuring stations are reporting near or record snow water equivalent amounts for this time of year. Lookout SNOTEL site has 30.3 inches of snow water, the most on January 1 since measurements started in 1949. Overall, the Panhandle Region has the highest snow water content levels since at least 1961 when most records start. Snowpack percentages range from 157% of average for the Moyie River to 232% for the Priest River. Low elevation snow is also above average throughout the region and is primed to melt rapidly if warm temperatures or rain should occur. Storage in the northern Idaho lakes is around half of capacity which is normal for this time of year. These natural lakes are in their winter operation and are passing inflows. Streamflow forecasts call for 150% of average for Coeur d'Alene River and 150% of average for the St. Joe River. With snowpacks well above average, extremely high streamflows could occur if sudden melting occurs. Residents in low lying areas should monitor the situation closely.

PANHANDLE REGION
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<=== Drier === Future Conditions === Wetter ===>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
KOOTENAI at Leonia (1,2)	APR-JUN	4598	5906	6500	114	7094	8402	5701
	APR-JUL	5833	7461	8200	114	8939	10567	7199
	APR-SEP	6708	8580	9430	114	10280	12152	8275
CLARK FK at Whitehorse Rpds (1,2)	APR-JUN	9445	12337	13650	136	14963	17855	10050
	APR-JUL	10869	14260	15800	135	17340	20731	11730
	APR-SEP	11973	15705	17400	135	19095	22827	12910
PEND OREILLE Lake Inflow (1,2)	APR-JUN	10619	14113	15700	138	17287	20781	11390
	APR-JUL	12817	16519	18200	138	19881	23583	13150
	APR-SEP	14013	18061	19900	139	21739	25866	14370
PRIEST nr Priest River (1,2)	APR-JUL	841	1054	1150	141	1246	1459	814
	APR-SEP	901	1127	1230	142	1333	1559	868
COEUR D'ALENE at Enaville	APR-JUL	894	1049	1155	150	1261	1416	770
	APR-SEP	943	1102	1210	150	1318	1477	809
ST.JOE at Calder	APR-JUL	1446	1627	1750	150	1873	2054	1169
	APR-SEP	1539	1724	1850	150	1976	2161	1237
SPOKANE near Post Falls (2)	APR-JUL	3215	3682	4000	152	4318	4785	2633
	APR-SEP	3347	3825	4150	152	4475	4953	2730
SPOKANE at Long Lake	APR-JUL	3534	4020	4350	148	4680	5166	2936
	APR-SEP	3803	4307	4650	147	4993	5497	3159

PANHANDLE REGION
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HUNGRY HORSE	3451.0	2388.0	3231.0	2586.0
FLATHEAD LAKE	1791.0	1132.0	1724.0	1305.0
NOXON RAPIDS	335.0	312.8	318.0	317.1
PEND OREILLE	1561.3	917.3	901.2	744.9
COEUR D'ALENE	238.5	93.5	146.5	130.5
PRIEST LAKE	119.3	69.0	78.0	54.8

PANHANDLE REGION
Watershed Snowpack Analysis - January 1, 1997

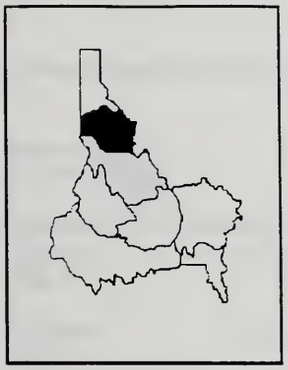
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Kootenai ab Bonners Ferry	13	143	167
Moyie River	1	149	157
Priest River	4	428	232
Pend Oreille River	65	202	199
Rathdrum Creek	4	829	242
Hayden Lake	0	0	0
Coeur d'Alene River	5	474	216
St. Joe River	2	290	203
Spokane River	11	467	220
Palouse River	1	528	275

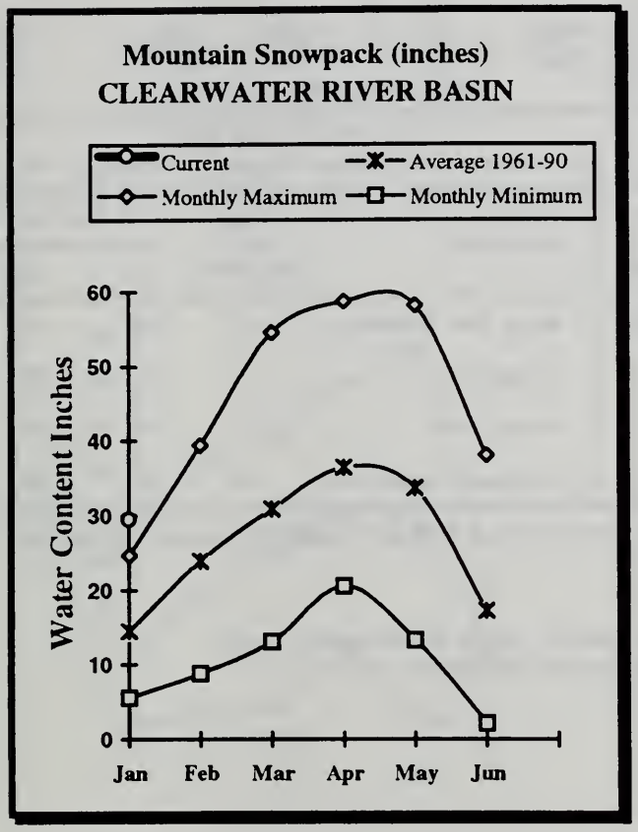
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

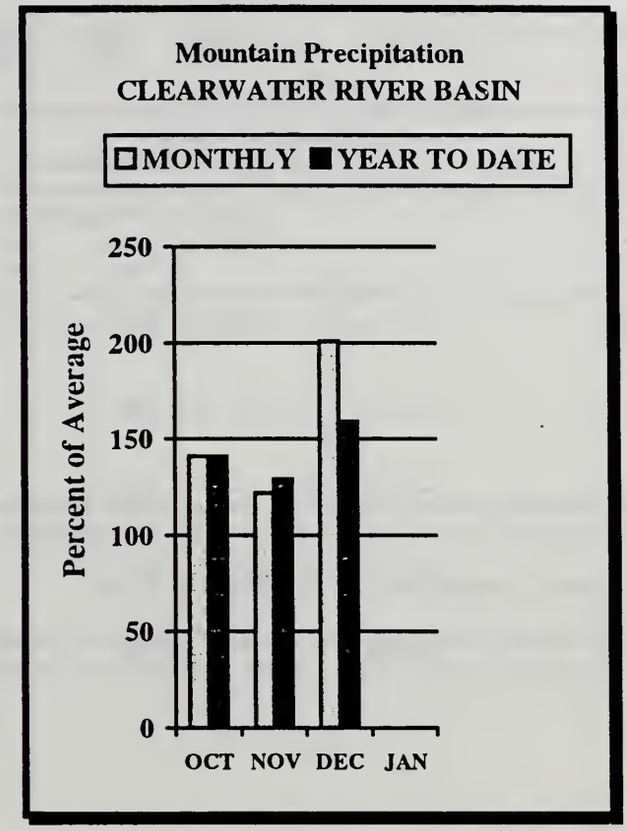
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

CLEARWATER RIVER BASIN
JANUARY 1, 1997







WATER SUPPLY OUTLOOK

December precipitation was tremendous at 200% of average, with many sites receiving 15-25 inches during the month. Precipitation for the water year stands at 157% of average, about the same as last year at this time. Similar to the Panhandle Region, many snow measuring stations are reporting a new January 1 snowpack record. Snowpack in the Clearwater basin is 202% of average -- the highest since records started in 1961. Cool Creek SNOTEL has 41.5 inches of snow water; the average is 20.6 inches. The previous January 1 record was 35 inches in 1972 and 1985. Many stations are reporting snow water content levels not usually attained until March. Dworshak Reservoir is 69% of capacity, and releases will be made in anticipation of the high flows. Streamflow forecasts call for 148% of average for the Clearwater basin streams. With well above average snowpacks in the mid-and high elevations, there is potential for flooding if warm or wet weather suddenly occurs. Residents in the area should monitor the situation closely.

CLEARWATER RIVER BASIN
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<= Drier = Future Conditions = Wetter =>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
DWORSHAK RESV INFLOW (2)	APR-JUL	2719	3680	3980	148	4280	5222	2692
	APR-SEP	3468	3928	4240	148	4552	5012	2866
CLEARWATER at Orofino (1)	APR-JUL	4181	5700	6390	135	7080	8599	4718
	APR-SEP	4407	6011	6740	136	7469	9073	4976
CLEARWATER at Spalding (1,2)	APR-JUL	7262	9832	11000	144	12168	14738	7618
	APR-SEP	7643	10364	11600	144	12836	15557	8052

CLEARWATER RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DWORSHAK	3459.0	2389.6	2693.4	2431.0

CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - January 1, 1997

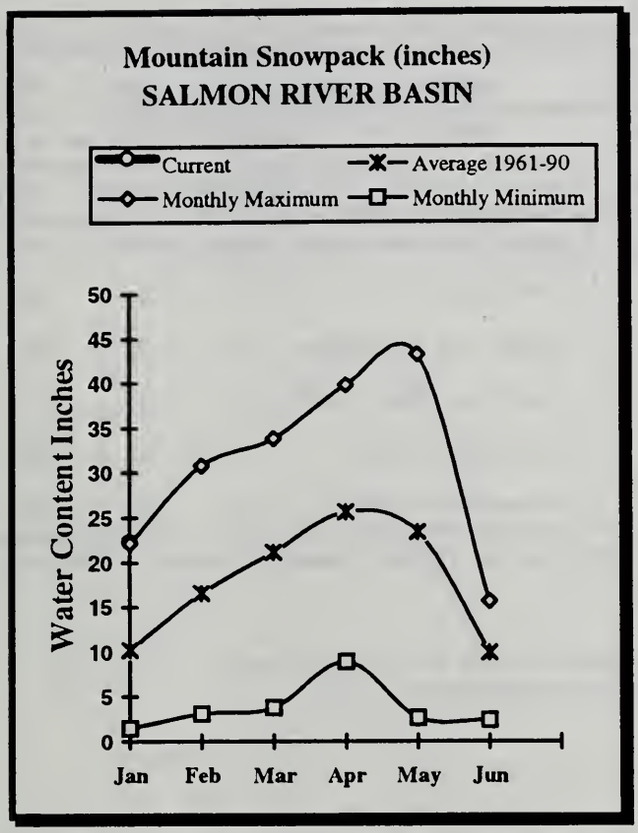
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork Clearwater	10	299	200
Lochsa River	3	181	213
Selway River	5	173	201
Clearwater Basin Total	17	249	202

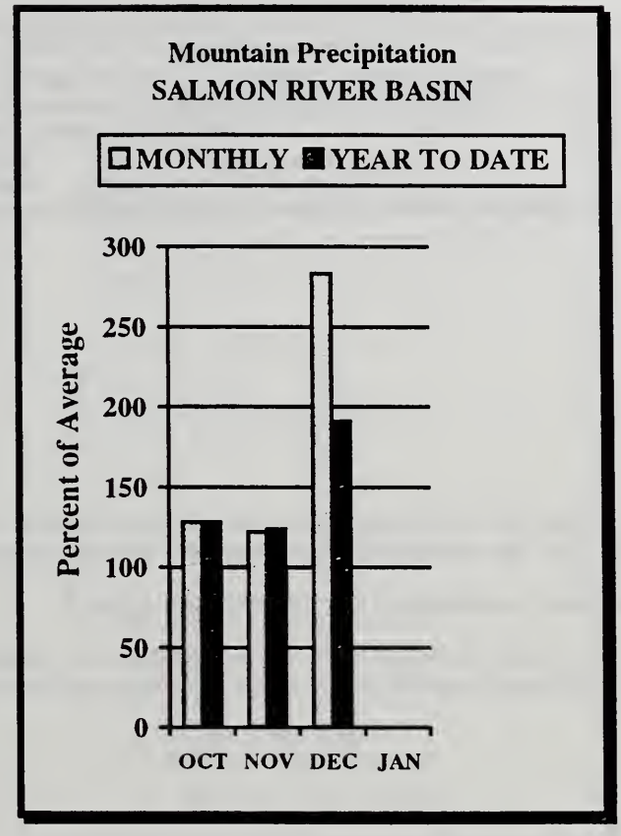
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

SALMON RIVER BASIN
JANUARY 1, 1997





WATER SUPPLY OUTLOOK

December precipitation was a whopping 280% of average, bringing the precipitation for the water year to 190% of average. Many snow measuring stations set records for the greatest monthly increase since the SNOTEL system began. Snowpacks across the Salmon basin are the highest since 1965 and range from 161% of average in the Lemhi River to 230% in the Salmon River above Salmon. Streamflow forecasts call for 174% of average for the Salmon River at Salmon and 159% for the Salmon River at White Bird. With snow levels well above average across the entire basin, extreme high flows may occur during a sudden warming. Summer flows will be high for an extended period. Residents should monitor the weather closely when warm weather occurs.

SALMON RIVER BASIN
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<= Drier = Future Conditions = Wetter =>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SALMON at Salmon (1)	APR-JUL	1069	1372	1510	174	1648	1951	869
	APR-SEP	1252	1608	1770	174	1932	2288	1019
SALMON at White Bird (1)	APR-JUL	7121	8736	9470	159	10204	11819	5956
	APR-SEP	7897	9687	10500	159	11313	13103	6602

SALMON RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

SALMON RIVER BASIN
Watershed Snowpack Analysis - January 1, 1997

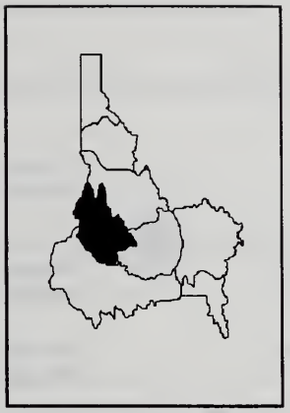
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Salmon River ab Salmon	8	179	230
Lemhi River	4	123	161
Middle Fork Salmon River	3	192	215
South Fork Salmon River	3	213	217
Little Salmon River	4	544	227
Salmon Basin Total	23	197	209

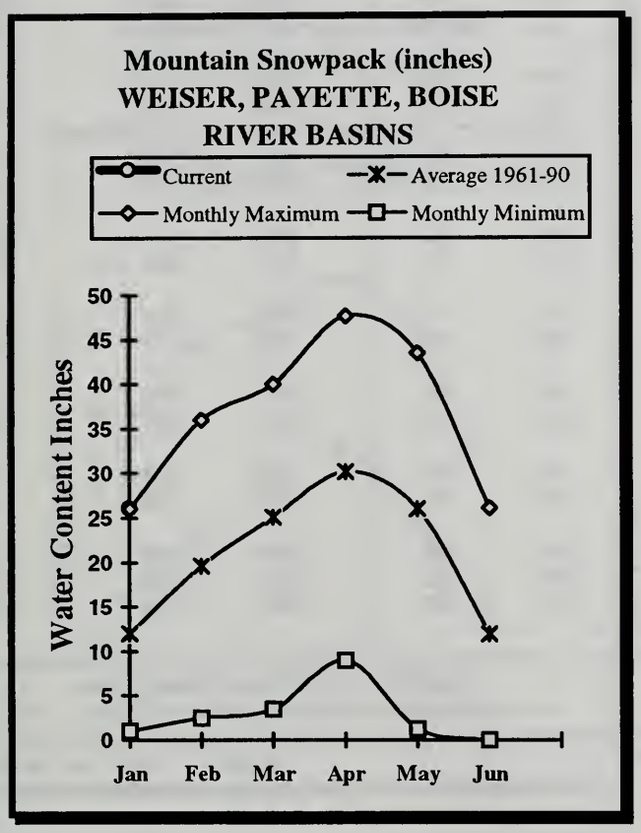
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

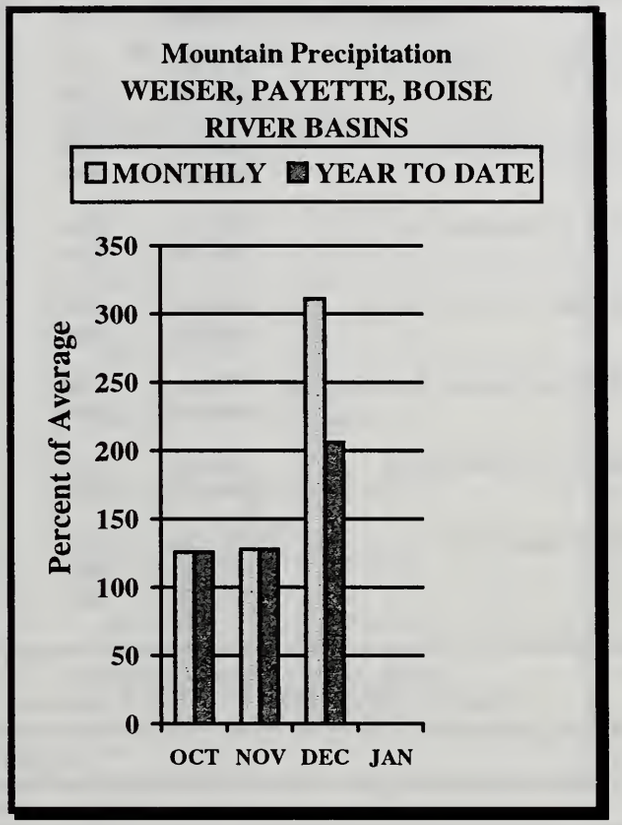
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

WEISER, PAYETTE, BOISE RIVER BASINS
JANUARY 1, 1997







WATER SUPPLY OUTLOOK

Record rainfall in December and low elevation snowmelt produced record flooding and mud slides in early January. The Weiser River crested at 7 feet over flood stage at an estimated flow rate greater than 24,000 cfs. This exceeded the previous record flow of 21,000 cfs in 1982. The lower Payette River reached 33,700 cfs. December precipitation was 300% of average, bringing the total for the water year to 200% of normal. Currently, the snowpack is 200 - 220% of normal throughout the Weiser, Payette and Boise basins. Deadwood Summit (located at 6,860 feet on the Deadwood/Salmon river basin divide) has 40 inches of snow water; the average is 20 inches for January 1. This is the highest reading since January 1965 when 44 inches was measured. Deadwood Summit and many other snow measuring stations are reporting snow water content levels not normally reported until March. As expected, streamflow forecasts are well above average and range from 161-194% of average. Reservoir storage is 74% of capacity for the Boise system and 84% of capacity for the Payette system; well above average for this time of year. Flood control releases are being made in the Boise and Payette basins in anticipation of next spring's runoff. Streamflows will remain high as a result of reservoir releases.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WEISER nr Weiser (1)	APR-JUL	376	544	620	161	696	864	386
	APR-SEP	404	583	665	160	747	926	415
SF PAYETTE at Lowman	APR-JUL	583	668	725	168	782	867	432
	APR-SEP	662	752	814	167	876	966	488
DEADWOOD RESERVOIR Inflow (1,2)	APR-JUL	198	240	255	189	270	302	135
	APR-SEP	223	257	272	190	287	321	143
NF PAYETTE nr Cascade (1,2)	APR-JUL	647	793	860	173	927	1073	496
	APR-SEP	678	834	905	170	976	1132	533
NF PAYETTE nr Banks (2)	APR-JUL	908	1043	1135	175	1227	1362	648
	APR-SEP	957	1099	1195	173	1291	1433	690
PAYETTE nr Horseshoe Bend (1,2)	APR-JUL	2299	2767	2980	184	3193	3661	1618
	APR-SEP	2461	2955	3180	181	3405	3899	1755
BOISE near Twin Springs (1)	APR-JUL	859	1032	1110	176	1188	1361	631
	APR-SEP	954	1133	1215	177	1297	1476	686
SF BOISE at Anderson Rnch Dm (1,2)	APR-JUL	765	913	980	180	1047	1195	544
	APR-SEP	839	991	1060	182	1129	1281	582
MORES CK nr Arrowrock Dam	APR-JUL	211	234	250	194	266	289	129
	APR-SEP	221	244	260	194	276	299	134
BOISE nr Boise (1,2)	APR-JUN	1875	2184	2325	184	2466	2775	1264
	APR-JUL	2055	2423	2590	182	2757	3125	1421
	APR-SEP	2254	2636	2810	183	2984	3366	1535

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MANN CREEK	11.1	4.8	3.9	4.2
CASCADE	703.2	598.0	639.8	419.7
DEADWOOD	161.9	131.0	129.4	73.7
ANDERSON RANCH	464.2	405.8	419.6	319.9
ARROWROCK	286.6	253.0	195.6	193.8
LUCKY PEAK	293.2	116.6	141.3	94.5
LAKE LOWELL (DEER FLAT)	177.1	106.0	138.9	126.0

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - January 1, 1997

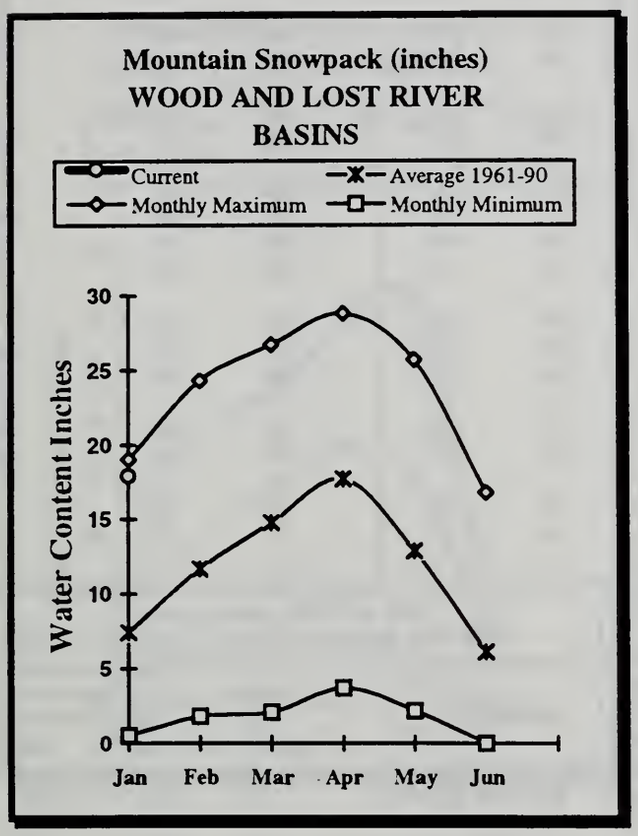
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Mann Creek	1	315	173
Weiser River	3	396	223
North Fork Payette	7	347	212
South Fork Payette	4	217	204
Payette Basin Total	12	288	210
Middle & North Fork Boise	7	229	220
South Fork Boise River	7	203	214
Mores Creek	3	384	233
Boise Basin Total	13	244	215
Canyon Creek	1	1175	152

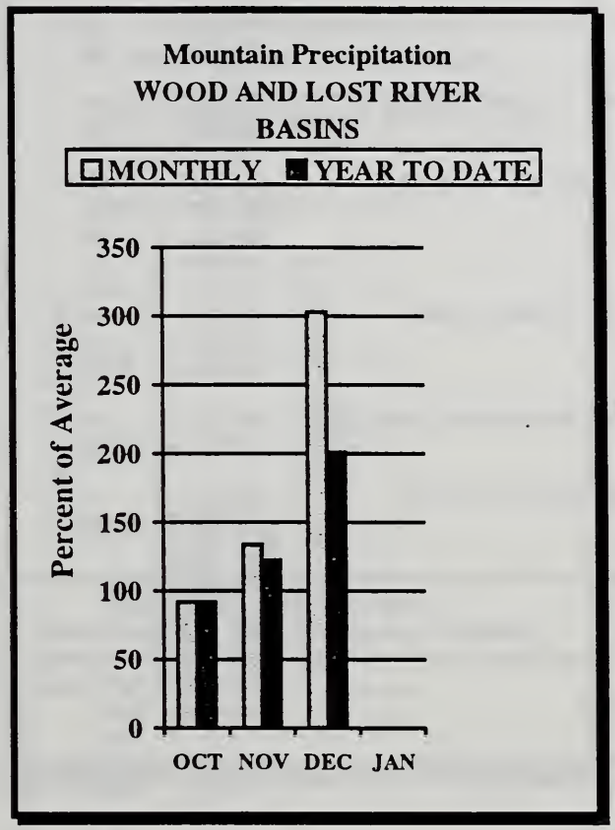
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

WOOD and LOST RIVER BASINS
JANUARY 1, 1997





WATER SUPPLY OUTLOOK

December temperatures were cold enough to keep the snow from melting in the Wood and Lost River basins. Precipitation was 300% of average in December and is 199% for the water year. The snowpack in these central Idaho mountains is the highest in the state at 250% of average. Lost-Wood Divide SNOTEL site at 7,900 feet has 28 inches of snow water, the same as in the record high year of January 1965 and 4 inches more than the April 1 average. Many sites tripled their snow water content during December. Little Wood Reservoir is 75% full, Magic Reservoir is 50% full and Mackay Reservoir is about 33% full. With streamflow forecasts in the 165-294% range, there will be plenty of water to fill these reservoirs. The Big Wood River is forecast at 214%, the Little Wood River at 193%, and the Big Lost River at 186%. High streamflows can be expected for an extended period in the spring and summer when the snow starts melting.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIG WOOD near Hailey (1)	APR-JUL	299	382	420	165	458	541	255
	APR-SEP	295	428	470	163	512	642	289
BIG WOOD near Bellevue	APR-JUL	235	291	330	180	369	425	183
	APR-SEP	252	310	350	178	390	448	197
CAMAS CREEK near Blaine	APR-JUL	205	259	300	294	344	413	102
	APR-SEP	209	264	305	296	349	418	103
BIG WOOD blw Magic Dam (2)	APR-JUL	488	573	630	214	687	772	295
	APR-SEP	506	592	650	210	708	794	310
LITTLE WOOD near Carey (2)	MAR-JUL	149	182	204	204	226	259	100
	MAR-SEP	165	199	222	206	245	279	108
	APR-JUL	125	156	177	193	198	230	92
	APR-SEP	150	168	190	191	212	227	99
BIG LOST at Howell Ranch	APR-JUN	184	214	234	166	254	284	141
	APR-JUL	245	287	316	175	345	387	181
	APR-SEP	283	329	361	175	393	439	206
BIG LOST below Mackay Reservoir (2)	APR-JUL	216	257	285	186	313	354	153
	APR-SEP	265	310	340	185	370	415	184
LITTLE LOST blw Wet Creek	APR-JUL	41	47	50	162	54	59	31
	APR-SEP	51	58	62	160	67	73	39

WOOD AND LOST RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MAGIC	191.5	99.6	138.6	89.0
LITTLE WOOD	30.0	22.0	23.3	13.5
MACKAY	44.4	15.2	32.2	26.4

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - January 1, 1997

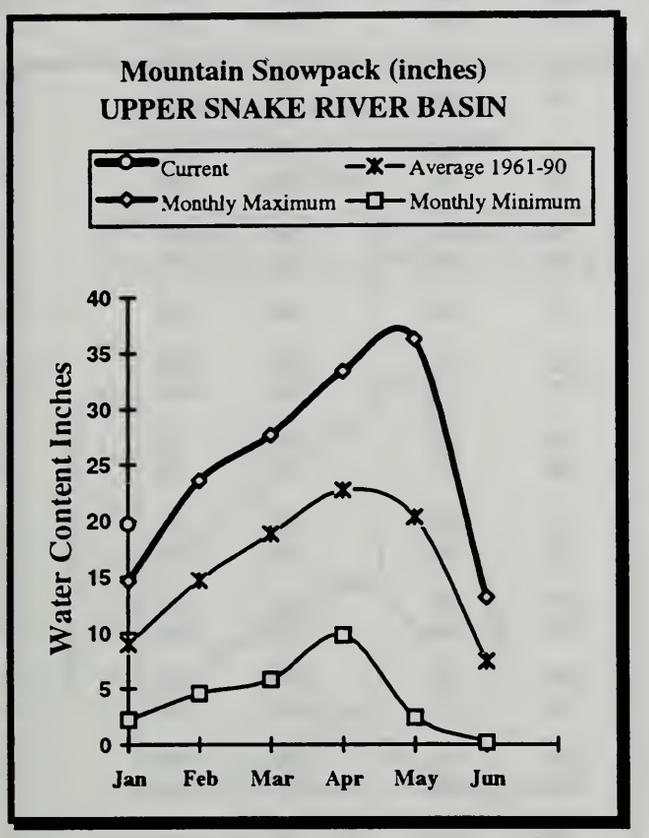
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Big Wood ab Magic	9	210	245
Camas Creek	3	358	211
Big Wood Basin Total	11	221	237
Little Wood River	3	289	235
Fish Creek	0	0	0
Big Lost River	5	268	279
Little Lost River	3	176	202

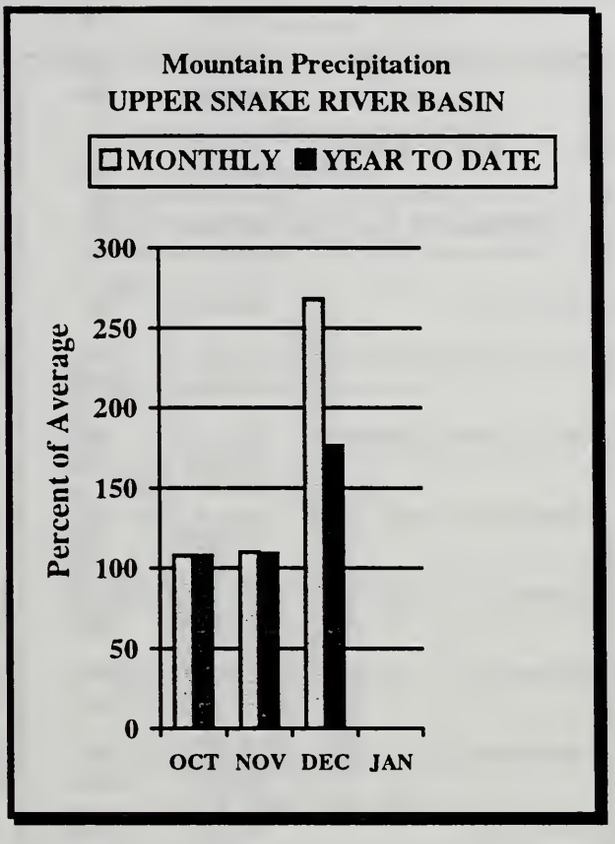
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER SNAKE RIVER BASIN
JANUARY 1, 1997





WATER SUPPLY OUTLOOK

Mountain precipitation was 275% of average in December and is 179% for the water year. Snow levels increased in record amounts in December. Snowpack is currently 223% of average for the Henrys Fork and 210% for the Snake basin above Palisades Reservoir. Snowpack in the lower elevation basins of Willow, Blackfoot and Portneuf is 240% of average. Potential flooding is possible if rapid warming occurs. Lewis Lake Divide SNOTEL site, located at 7,860 feet in Yellowstone National Park, has 31.3 inches of snow water. This is the highest January 1 reading since records started in 1951 and is only 6 inches below the April 1 average of 37 inches. Many sites tripled in snow water content during December. Overall, the upper Snake basin has the highest snowpack of the last 30 years. Flood control releases are being made or inflows are being passed from reservoirs in order to maintain adequate storage space for next spring's runoff. Currently, the 8 major reservoirs in the upper Snake basin are reporting a combined storage of 84% of capacity, well above average for this time of year. Streamflow forecasts call for 132% of average for the Henrys Fork and 144% for Palisades Reservoir inflow. Reservoir releases will continue in order to maintain storage space for next spring's anticipated high streamflow.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<=== Drier === Future Conditions === Wetter ===>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HENRYS FORK nr Ashton (2)	APR-JUL	602	660	700	129	740	798	544
	APR-SEP	803	870	915	125	960	1027	730
HENRYS FORK nr Rexburg (2)	APR-JUL	1421	1569	1670	136	1771	1919	1228
	APR-SEP	1796	1964	2078	134	2192	2360	1551
FALLS RIVER nr Squirrel (1,2)	APR-JUL	385	444	470	129	496	555	364
	APR-SEP	458	526	557	129	588	656	432
TETON abv S Leigh Ck nr Driggs	APR-JUL	208	235	254	166	273	300	153
	APR-SEP	272	306	329	165	352	386	199
TETON nr St. Anthony (2)	APR-JUL	454	514	555	148	596	656	375
	APR-SEP	546	614	660	145	706	774	454
SNAKE nr Moran (1,2)	APR-SEP	897	1092	1180	136	1268	1463	869
SNAKE R abv Palisades Rsvr nr Alpine	APR-JUL	2678	3008	3232	141	3456	3786	2286
	APR-SEP	3088	3468	3727	141	3986	4366	2647
GREYS R abv Palisades Reservoir	APR-JUL	383	443	483	145	523	583	333
	APR-SEP	454	520	565	146	610	676	388
SALT abv Reservoir nr Etna	APR-JUL	358	434	485	152	536	612	320
	APR-SEP	450	536	595	149	654	740	400
PALISADES RESV INFLOW (1,2)	APR-JUL	3532	4306	4657	144	5008	5782	3225
	APR-SEP	4094	4951	5340	142	5729	6586	3762
SNAKE nr Heise (2)	APR-JUL	3993	4554	4935	143	5316	5877	3451
	APR-SEP	4614	5261	5700	141	6139	6786	4048
SNAKE nr Blackfoot (1,2)	APR-JUL	4971	6009	6480	146	6951	7989	4444
	APR-SEP	6258	7422	7950	145	8478	9642	5482
PORTNEUF at Topaz	MAR-JUL	103	116	125	145	134	147	86
	MAR-SEP	127	143	153	143	163	179	107
AMERICAN FALLS RESV INFLOW (1,2)	APR-JUL	3281	4525	5000	163	5475	6745	3066
	APR-SEP	3620	4789	5320	161	5851	7020	3303

UPPER SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HENRYS LAKE	90.4	88.1	88.1	74.0
ISLAND PARK	135.2	120.3	119.6	88.9
GRASSY LAKE	15.2	12.7	12.8	10.5
JACKSON LAKE	847.0	680.0	667.8	470.2
PALISADES	1400.0	1244.9	1375.9	1035.6
RIRIE	80.5	42.4	40.6	36.4
BLACKFOOT	348.7	275.1	211.2	230.6
AMERICAN FALLS	1672.6	1407.1	1287.6	1002.4

UPPER SNAKE RIVER BASIN
Watershed Snowpack Analysis - January 1, 1997

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Camas-Beaver Creeks	4	293	171
Henrys Fork River	8	210	225
Teton River	7	267	201
Snake above Jackson Lake	6	160	212
Gros Ventre River	2	133	189
Hoback River	5	153	218
Greys River	3	141	195
Salt River	4	142	205
Snake above Palisades	19	153	210
Willow Creek	7	463	259
Blackfoot River	3	314	238
Portneuf River	2	222	229
Snake abv American Falls	29	181	219

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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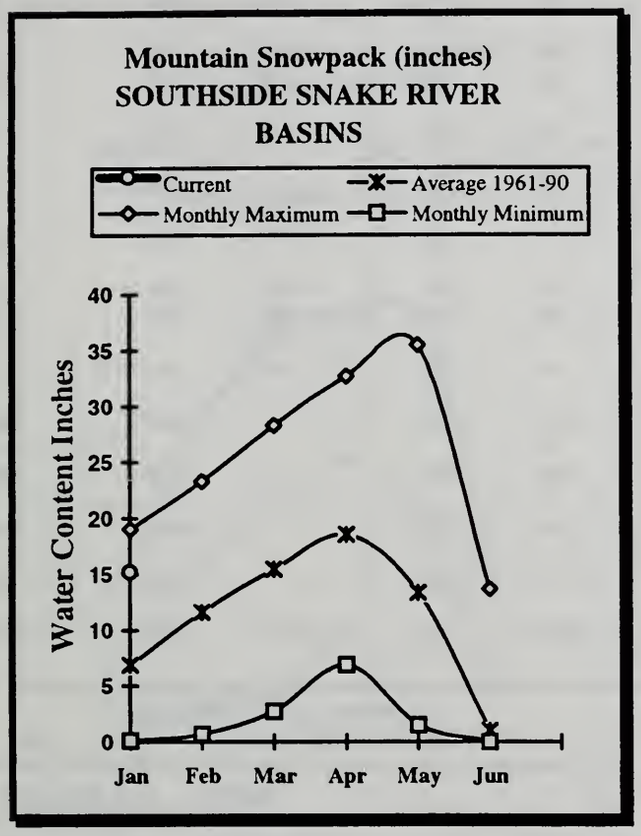
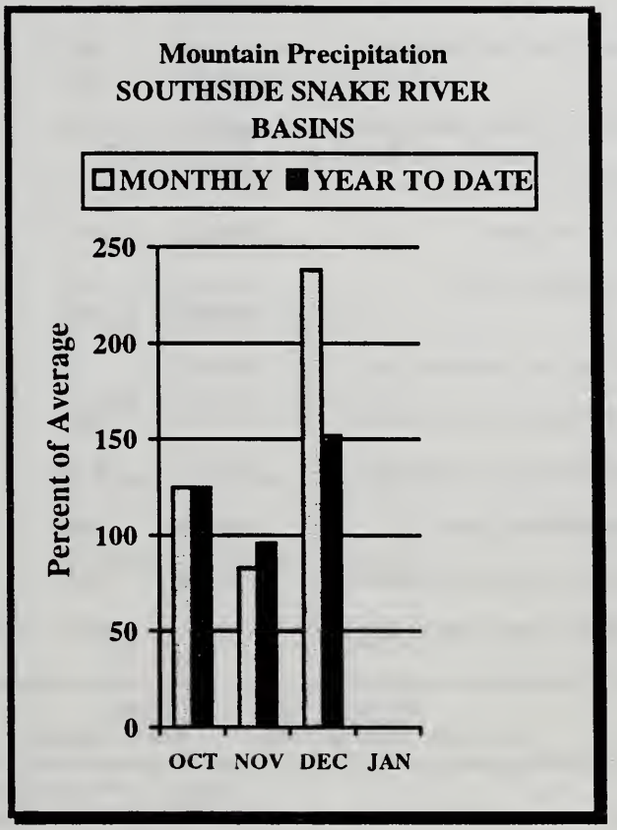
SOUTHSIDE SNAKE RIVER BASINS JANUARY 1, 1997





WATER SUPPLY OUTLOOK

Snowpacks in the basins south of the Snake River are the highest since 1984. Currently, SNOTEL sites in south central Idaho are about 10 inches of snow water less than the record high values set in January 1984. December precipitation was 250% of average and the water year stands at 160% . Snowpack levels are currently 268% of average in the Oakley basin, about 200% in the Salmon Falls and Bruneau basins, and 186% of average in the Owyhee basin. Rainfall and low elevation snowmelt raised the level of many streams across southern Idaho. The Owyhee River peaked at more than 20,000 cfs in early January. The Snake River in Hell's Canyon set a new peak flow record that exceeded 100,000 cfs. Salmon Falls Reservoir is 25% full, about the same as a year ago. Oakley Reservoir is 33% full while Owyhee Reservoir is 66% full. Streamflow forecasts call for 173% of average for Oakley Reservoir inflow, 180% for Salmon Falls Creek and 204% for the Owyhee River. Reservoir operators should watch the situation closely as conditions can change quickly.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
OAKLEY RESV INFLOW	MAR-JUL	40	50	57	173	65	77	33
	MAR-SEP	42	52	60	166	68	81	36
SALMON FALLS CREEK nr San Jacinto	MAR-JUN	105	134	155	179	178	214	86
	MAR-JUL	112	142	165	180	189	228	92
	MAR-SEP	117	147	170	177	194	233	96
BRUNEAU near Hot Springs	MAR-JUL	306	375	425	181	479	563	235
	MAR-SEP	313	383	435	177	490	577	246
OWYHEE near Gold Creek (2)	MAR-JUL	44	52	58	185	64	73	31
OWYHEE nr Owyhee (2)	APR-JUL	111	142	163	190	184	215	86
OWYHEE near Rome	FEB-JUL	972	1248	1455	234	1678	2035	622
OWYHEE RESV INFLOW	FEB-JUL	903	1153	1341	204	1543	1866	656
	APR-SEP	562	757	906	217	1068	1332	418
SUCCOR CK nr Jordan Valley	FEB-JUL	22	29	34	210	39	46	16.2
SNAKE RIVER at King Hill (2)	APR-JUL	2346		3730	129		5097	2896
SNAKE RIVER near Murphy (2)	APR-JUL	2473		3880	130		5275	2980
SNAKE RIVER at Weiser (2)	APR-JUL	6449		9580	175		12679	5465
SNAKE RIVER at Hells Canyon Dam	APR-JUL	7416		10800	176		14219	6129
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	22127	29604	33000	152	36396	43873	21650

SOUTHSIDE SNAKE RIVER BASINS
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
OAKLEY	77.4	26.2	20.6	23.7
SALMON FALLS	182.6	48.0	49.0	44.9
WILDHORSE RESERVOIR	71.5	51.0	37.8	30.5
OWYHEE	715.0	454.6	482.0	421.0
BROWNLEE	1419.3	1415.4	1361.7	1269.8

SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - January 1, 1997

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Raft River	1	288	278
Goose-Trapper Creeks	2	296	268
Salmon Falls Creek	4	208	205
Bruneau River	5	218	200
Owyhee Basin Total	8	445	186

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
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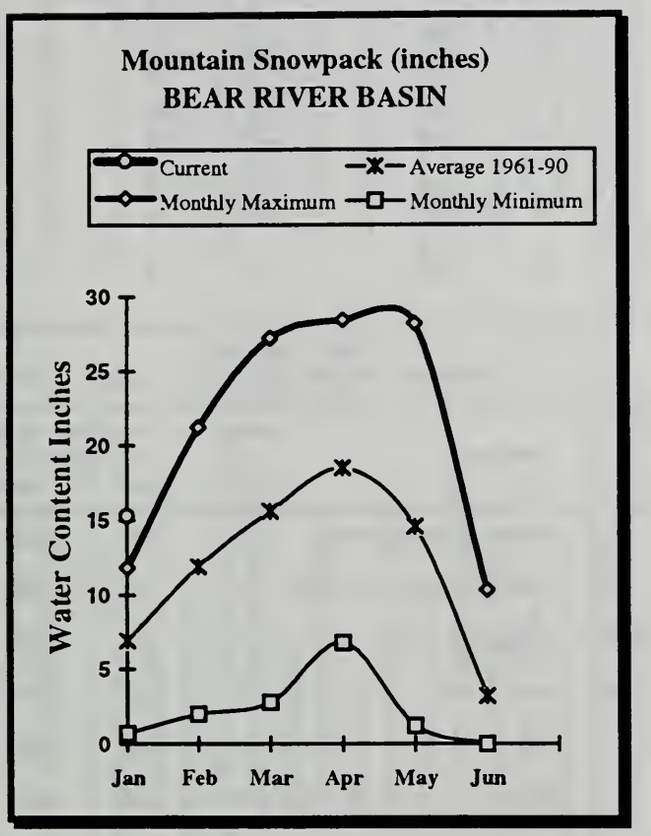
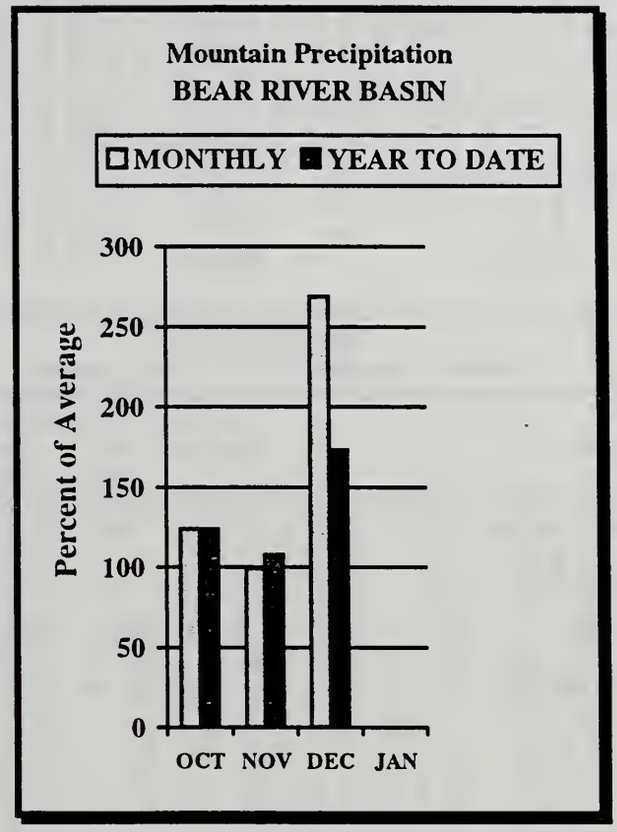
BEAR RIVER BASIN
JANUARY 1, 1997





WATER SUPPLY OUTLOOK

Precipitation in December was 270% of average and stands at 170% for the water year. Many snow measuring stations are at levels normally not reached until March. Emigrant Summit has 20.3 inches of snow water; the average is 9.5 inches for January 1. This is the highest January 1 reading since 1984 when the site had 24.5 inches of snow water. Overall, the Bear River basin snowpack is 210% of average. Montpelier Creek basin is 172% of average and Smith and Thomas Forks are 243% of average. Storage in Bear Lake is increasing and is currently 63% of capacity which is just under average. Reservoir releases were made from Montpelier Creek Reservoir, bringing it down to 65% of capacity. Montpelier Creek is forecast at 148% of average, so there will be no problem filling the reservoir this year. Bear River at Stewart Dam is forecast at 127% of average. Cub River is forecast at 128% of average. With heavy snowpacks and streamflows forecast at 165% or better, water users should monitor the situation closely over the next few months.

BEAR RIVER BASIN
Streamflow Forecasts - January 1, 1997

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ====== Wetter ======>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BEAR R nr Randolph, UT	APR-JUL	70	118	150	127	182	230	118
	APR-SEP	76	127	162	128	197	248	127
SMITHS FORK nr Border, WY	APR-JUL	119	137	150	147	163	181	102
	APR-SEP	139	160	175	148	190	211	118
THOMAS FK nr WY-ID State Line	APR-JUL	25	39	53	161	72	115	33
	APR-SEP	28	43	58	161	78	121	36
BEAR R blw Stewart Dam nr Montpelier	APR-JUL	250	318	365	127	412	480	288
	APR-SEP	288	363	415	127	467	542	327
MONTPELIER CK nr Montpelier (2)	APR-JUL	10.0	14.2	18.0	148	23	32	12.2
	APR-SEP	13.5	18.1	22	155	27	36	14.2
CUB R nr Preston	APR-JUL	42	53	60	128	67	78	47

BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	30.2	44.0	---
WOODRUFF CREEK	4.0	2.4	3.1	---
BEAR LAKE	1421.0	897.5	576.2	992.6
MONTPELIER CREEK	4.0	2.6	3.0	1.6

BEAR RIVER BASIN
Watershed Snowpack Analysis - January 1, 1997

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Smiths & Thomas Forks	2	169	243
Bear River ab WY-ID line	7	168	198
Montpelier Creek	1	238	172
Mink Creek	1	226	214
Cub River	1	165	260
Bear River ab ID-UT line	13	180	210
Malad River	1	320	356

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Streamflow Adjustment List For All Forecasts Published In Idaho Basin Outlook Report

Streamflow forecasts are projections of runoff volumes that would have occurred naturally without influences from upstream reservoirs or diversions. These values are referred to as natural or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and interbasin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made to each forecast point in this report.

Panhandle River Basins

KOOTENAI R AT LEONIA, ID
+ LAKE KOOCANUSA (STORAGE CHANGE)

CLARK FORK R AT WHITEHORSE RAPIDS, ID
+ HUNGRY HORSE (STORAGE CHANGE)
+ FLATHEAD LAKE (STORAGE CHANGE)
+ NOXON RAPIDS RESV (STORAGE CHANGE)

PEND OREILLE LAKE INFLOW, ID
+ PEND OREILLE R AT NEWPORT, WA
+ HUNGRY HORSE (STORAGE CHANGE)
+ FLATHEAD LAKE (STORAGE CHANGE)
+ NOXON RAPIDS (STORAGE CHANGE
+ PEND OREILLE LAKE (STORAGE CHANGE)

PRIEST R NR PRIEST R, ID
+ PRIEST LAKE (STORAGE CHANGE)

COEUR D'ALENE R AT ENAVILLE, ID - No Corrections

ST. JOE R AT CALDER, ID - No Corrections

SPOKANE R NR POST FALLS, ID
+ COEUR D'ALENE LAKE (STORAGE CHANGE)

SPOKANE R AT LONG LAKE, ID
+ COEUR D'ALENE LAKE (STORAGE CHANGE)

Clearwater River Basin

CLEARWATER R AT OROFINO, ID - No Corrections

DWORSHAK RESERVOIR INFLOW, ID
+ CLEARWATER R NR PECK, ID
+ DWORSHAK RESV (STORAGE CHANGE)
- CLEARWATER R AT OROFINO, ID

CLEARWATER R AT SPALDING, ID
+ DWORSHAK RESV (STORAGE CHANGE)

Salmon River Basin

SALMON R AT SALMON, ID - No Corrections

SALMON R AT WHITE BIRD, ID - No Corrections

Weiser, Payette, Boise River Basins

WEISER R NR WEISER, ID - No Corrections

SF PAYETTE R AT LOWMAN, ID - No Corrections

DEADWOOD RESERVOIR INFLOW, ID
+ DEADWOOD R BLW DEADWOOD RESV NR LOWMAN
+ DEADWOOD RESV (STORAGE CHANGE)

NF PAYETTE R AT CASCADE, ID
+ CASCADE RESV (STORAGE CHANGE)

NF PAYETTE R NR BANKS, ID
+ CASCADE RESV (STORAGE CHANGE)

PAYETTE R NR HORSESHOE BEND, ID
+ DEADWOOD RESV (STORAGE CHANGE)
+ CASCADE RESV (STORAGE CHANGE)

BOISE R NR TWIN SPRINGS, ID - No Corrections

SF BOISE R AT ANDERSON RANCH DAM, ID
+ ANDERSON RANCH RESV (STORAGE CHANGE)

MORES CK NR ARROWROCK DAM, ID - No Corrections

BOISE R NR BOISE, ID
+ ANDERSON RANCH RESV (STORAGE CHANGE)
+ ARROWROCK RESV (STORAGE CHANGE)
+ LUCKY PEAK RESV (STORAGE CHANGE)

Wood and Lost River Basins

BIG WOOD R AT HAILEY, ID - No Corrections

BIG WOOD R NR BELLEVUE, ID - No Corrections

CAMAS CK NR BLAINE, ID - No Corrections

BIG WOOD R BLW MAGIC DAM NR RICHFIELD, ID
+ MAGIC RESV (STORAGE CHANGE)

LITTLE WOOD R NR CAREY, ID
+ LITTLE WOOD RESV (STORAGE CHANGE)

BIG LOST R AT HOWELL RANCH NR CHILLY, ID - No Corrections

BIG LOST R BLW MACKAY RESV NR MACKAY, ID
+ MACKAY RESV (STORAGE CHANGE)

LITTLE LOST R BLW WET CK NR HOWE, ID - No Corrections

Upper Snake River Basin

HENRYS FORK NR ASHTON, ID
+ HENRYS LAKE (STORAGE CHANGE)
+ ISLAND PARK RESV (STORAGE CHANGE)

HENRYS FORK NR REXBURG, ID
+ HENRYS LAKE (STORAGE CHANGE)
+ ISLAND PARK RESV (STORAGE CHANGE)
+ DIV FM HENRYS FK BTW ASHTON & ST. ANTHONY, ID
+ DIV FM HENRYS FK BTW ST. ANTHONY & REXBURG, ID
+ GRASSY LAKE (STORAGE CHANGE)

FALLS R NR SQUIRREL, ID (Discontinued)

TETON R ABV SO LEIGH CK NR DRIGGS, ID - No Corrections

TETON R NR ST. ANTHONY, ID
- CROSS CUT CANAL
+ SUM OF DIVERSIONS ABV GAGE

SNAKE R NR MORAN, WY
+ JACKSON LAKE (STORAGE CHANGE)

PACIFIC CK AT MORAN, WY - No Corrections

SNAKE R ABV PALISADES RESV NR ALPINE, WY
+ JACKSON LAKE (STORAGE CHANGE)

GREYS R ABV PALISADES RESV, WY - No Corrections

SALT R ABV RESV NR ETNA, WY - No Corrections

PALISADES RESERVOIR INFLOW, ID
+ SNAKE R NR IRWIN, ID
+ PALISADES RESV (STORAGE CHANGE)
+ JACKSON LAKE (STORAGE CHANGE)

SNAKE R NR HEISE, ID
+ PALISADES RESV (STORAGE CHANGE)
+ JACKSON LAKE (STORAGE CHANGE)

SNAKE R NR BLACKFOOT, ID
+ PALISADES RESV (STORAGE CHANGE)
+ JACKSON LAKE (STORAGE CHANGE)
+ DIV FM SNAKE R BTW HEISE AND SHELLY GAGES
+ DIV FM SNAKE R BTW SHELLY AND BLACKFT, ID

PORTNEUF R AT TOPAZ, ID - No Corrections

AMERICAN FALLS RESERVOIR INFLOW, ID
+ SNAKE R AT NEELEY, ID
+ AMERICAN FALLS (STORAGE CHANGE)
+ PALISADES RESV (STORAGE CHANGE)
+ JACKSON LAKE (STORAGE CHANGE)

Southside Snake River Basins

OAKLEY RESERVOIR INFLOW, ID
+ GOOSE CK ABV TRAPPER CK NR OAKLEY, ID
+ TRAPPER CK NR OAKLEY, ID
SALMON FALLS CK NR SAN JACINTO, NV - No Corrections
BRUNEAU R NR HOT SPRINGS, ID - No Corrections
OWYHEE R NR GOLD CK, NV
+ WILDHORSE RESV (STORAGE CHANGE)
OWYHEE R NR ROME, OR
+ WILDHORSE RESV (STORAGE CHANGE)
+ JORDAN VALLEY RESV (STORAGE CHANGE)
OWYHEE RESERVOIR INFLOW, OR
+ OWYHEE R BLW OWYHEE DAM, OR
+ OWYHEE RESV (STORAGE CHANGE)
+ DIV TO NORTH AND SOUTH CANALS
SUCCOR CK NR JORDAN VALLEY, OR - No Corrections
SNAKE R - KING HILL, ID - No Corrections
SNAKE R NR MURPHY, ID - No Corrections
SNAKE R AT WEISER, ID - No Corrections
SNAKE R AT HELLS CANYON DAM, ID
+ BROWNLEE RESV (STORAGE CHANGE)

Bear River Basin

BEAR R NR RANDOLPH, UT
+ SULPHUR CK RESV (STORAGE CHANGE)
+ CHAPMAN CANAL DIVERSION
+ WOODRUFF NARROWS RESV (STORAGE CHANGE)
SMITHS FORK NR BORDER, WY - No Corrections
THOMAS FORK NR WY-ID STATELINE - No Corrections
BEAR R BLW STEWART DAM, ID
+ SULPHUR CK RESV (STORAGE CHANGE)
+ CHAPMAN CANAL DIVERSION
+ WOODRUFF NARROWS RESV (STORAGE CHANGE)
+ TOTAL OF 12 CANALS
+ WESTFORK CANAL
+ DINGLE INLET CANAL
+ RAINBOW INLET CANAL
MONTPELIER CK NR MONTPELIER, ID
+ MONTPELIER CK RESV (STORAGE CHANGE)
CUB R NR PRESTON, ID - No Corrections

RESERVOIR CAPACITY DEFINITIONS - Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. The table below lists these volumes for each reservoir in this report, and defines the storage volumes that NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage, which includes active and inactive storage.

BASIN/ RESERVOIR	DEAD STORAGE	INACTIVE STORAGE	ACTIVE STORAGE	SURCHARGE STORAGE	NRCS CAPACITY	NRCS FIGURES INCLUDE
PANHANDLE REGION						
HUNGRY HORSE	39.73	--	3451.00	--	3451.0	ACTIVE
FLATHEAD LAKE	Unknown	--	1791.00	--	1971.0	ACTIVE
NOXON RAPIDS	Unknown	--	335.00	--	335.0	ACTIVE
PEND OREILLE	406.20	112.40	1042.70	--	1561.3	DEAD + INACTIVE + ACTIVE
COEUR D'ALENE	--	13.50	225.00	--	238.5	INACTIVE + ACTIVE
PRIEST LAKE	20.00	28.00	71.30	--	119.3	DEAD + INACTIVE + ACTIVE
CLEARWATER BASIN						
DWORSHAK	--	1452.00	2007.00	--	3459.0	INACTIVE + ACTIVE
WEISER/BOISE/PAYETTE BASINS						
MANN CREEK	1.61	0.24	11.10	--	11.1	ACTIVE
CASCADE	--	50.00	653.20	--	703.2	INACTIVE + ACTIVE
DEADWOOD	1.50	--	161.90	--	161.9	ACTIVE
ANDERSON RANCH	29.00	41.00	423.18	--	464.2	INACTIVE + ACTIVE
ARROWROCK	--	--	286.60	--	286.6	ACTIVE
LUCKY PEAK	--	28.80	264.40	13.80	293.2	INACTIVE + ACTIVE
LAKE LOWELL	--	8.00	169.10	--	169.1	ACTIVE
WOOD/LOST BASINS						
MAGIC	--	--	191.50	--	191.5	ACTIVE
LITTLE WOOD	--	--	30.00	--	30.0	ACTIVE
MACKAY	0.13	--	44.37	--	44.4	ACTIVE
UPPER SNAKE BASIN						
HENRYS LAKE	--	--	90.40	--	90.4	ACTIVE
ISLAND PARK	0.40	--	127.30	7.90	135.2	ACTIVE + SURCHARGE
GRASSY LAKE	--	--	15.18	--	15.2	ACTIVE
JACKSON LAKE	--	--	847.00	--	847.0	ACTIVE
PALISADES	44.10	155.50	1200.00	--	1400.0	DEAD + INACTIVE + ACTIVE
RIRIE	4.00	6.00	80.54	10.00	80.5	ACTIVE
BLACKFOOT	--	--	348.73	--	348.7	ACTIVE
AMERICAN FALLS	--	--	1672.60	--	1672.6	ACTIVE
SOUTHSIDE SNAKE BASINS						
OAKLEY	--	--	77.40	--	77.4	ACTIVE
SALMON FALLS	48.00	--	182.65	--	182.6	ACTIVE
WILDHORSE	--	--	71.50	--	71.5	ACTIVE
OWYHEE	406.83	--	715.00	--	715.0	ACTIVE
BROWNLEE	0.45	444.00	975.30	--	1419.3	INACTIVE + ACTIVE
BEAR RIVER BASIN						
WOODRUFF NARROWS	--	1.50	57.30	--	57.3	ACTIVE
WOODRUFF CREEK	--	4.00	4.00	--	4.0	ACTIVE
BEAR LAKE	--	--	1421.00	--	1421.0	ACTIVE
MONTPELIER CREEK	0.21	--	3.84	--	4.0	DEAD + ACTIVE

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflows are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations. There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast: it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value. There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent chance that the streamflow volume will exceed this forecast value. There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value.

10 Percent Chance of Exceeding Forecast. There is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River newa Deeth between March 1 and July 31.

Using the Higher Exceedance Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast.

If users anticipate extremely dry conditions for the remainder of the season, or if they detrmine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast.

Using the Lower Exceedance Forecasts. If users expect wetter future conditions, or if the chance that five out of every ten years with similar conditions would produce streamflow volumes greater that 36,000 acre-feet was more than they would like to risk, they might plan on receiveing 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems. Three out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

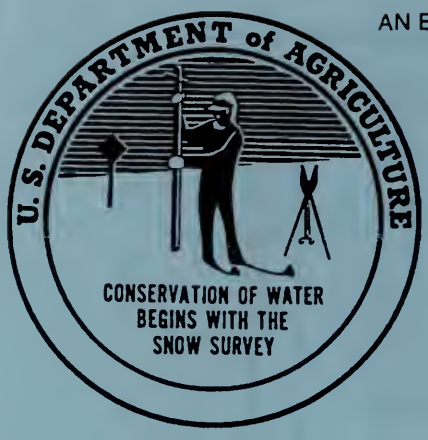
In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

UPPER HUMBOLDT RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	<--DRIER--FUTURE CONDITIONS--WETTER--> Chance of Exceeding 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG)	30% (1000AF)	10% (1000AF)	25 YR (1000AF)
MARY'S RIVER	MAR-JUL	5.0	20.0	36	77	52	76	47
nr Deeth	APR-JUL	8.0	17.0	31	74	45	67	42
LAMOILLE CREEK	MAR-JUL	6.0	16.0	24	79	32	43	31
nr Lamoille	APR-JUL	4.0	15.0	22	75	30	41	30
NR HUMBOLDT RIVER at Devils Gate	MAR-JUL	6.0	12.0	43	73	74	121	59

For more information concerning streamflow forecasting ask your local NRCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts".



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